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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,407	09/28/2001	Robert E. Haines	10012345-1	8759

7590 01/25/2006
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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Fort Collins, CO 80572-2400

EXAMINER

NGUYEN, TUAN HOANG

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/966,407	Applicant(s) HAINES ET AL.	
	Examiner Tuan H. Nguyen	Art Unit 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response To Arguments***

1. This office action is response to the amendment filed on 11/21/2005, claims 1-20 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 8-12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen et al. (US PAT. 6,842,460 hereinafter, "Olkkonen") in view of Stewart et al. (US PAT. 6,259,405 hereinafter, "Stewart").

Regarding claim 1, Olkkonen discloses a method of identifying and prioritizing wireless network devices (Fig. 1A items 104, 114, and 124), the method comprising: detecting a signal from one or more wireless network devices, wherein each signal has at least one signal quality (col. 4 lines 60-67); associating the at least one signal quality with its respective wireless network device for each wireless network device that

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matches the selection criteria (col. 11 line 33 through col. 12 line 40 and Fig. 1C col. 16 lines 10-22); and prioritizing (read on "ranks") the wireless network devices (Fig. 1A items 104, 114, and 124) that match the selection criteria based on their associated at least one signal quality (col. 14 lines 30-45). Olkkonen differs from the claimed invention in not specifically teaching for querying for supplemental information from each of the detected wireless network devices; identifying each of the detected wireless network devices that match a selection criteria using the supplemental information. However, Stewart teaches querying for supplemental information from each of the detected wireless network devices (col. 16 lines 29-49); identifying each of the detected wireless network devices that match a selection criteria using the supplemental information (col. 2 line 50 through col. 3 line 3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for querying for supplemental information from each of the detected wireless network devices; identifying each of the detected wireless network devices that match a selection criteria using the supplemental information as per teaching of Stewart, because it provides communications service system that includes a network and a plurality of access points connected to the network and arranged at known locations in a geographic region. One or more service providers or information providers may be connected to the network to provide services or information on the network.

Regarding claim 2, Olkkonen further discloses detecting a signal from one or more wireless network devices further comprises broadcasting a request (read on

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"gathers information") from a reference network device and detecting a response from the one or more wireless network devices (col. 21 lines 4-19).

Regarding claim 3, Olkkonen further discloses the at least one signal quality includes a signal quality selected from the group consisting of a signal strength, a signal noise and a signal-to-noise ratio (col. 6 lines 44-51).

Regarding claim 4, Olkkonen further discloses identifying each of the detected wireless network devices that match a selection criteria comprises at least one selection criterion selected from the group consisting of device type, device name, device features, device capabilities, device status, past device performance, available consumables, transaction costs and device permissions (col. 22 lines 34-38).

Regarding claim 8, Olkkonen further discloses prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices that match the selection criteria based on a signal strength of the received signal such that the wireless network device associated with the highest signal strength receives the highest priority (col. 4 lines 60-67).

Regarding claim 9, Olkkonen further discloses establishing communication with

the wireless network device that matches the selection criteria and has the highest priority (col. 46 lines 51-60).

Regarding claim 10, Olkkonen further discloses providing a list of the prioritized wireless network devices that match the selection criteria to a user (col. 47 lines 25-29); and establishing communication with a wireless network device selected from the prioritized list by the user (col. 47 lines 25-29).

Regarding claim 11, Olkkonen further discloses highlighting a portion of the list of prioritized wireless network devices based on a signal quality of the detected signals (col. 4 lines 60-67).

Regarding claim 12, Olkkonen discloses a method of identifying and prioritizing wireless network devices, the method comprising: for one or more wireless network devices: detecting a wireless network device, wherein the wireless network device transmits a signal having a first signal quality (col. 4 lines 60-67); and associating the first signal quality with the wireless network device when it is of the desired type and it has the desired status (col. 6 lines 27-43); generating a list of wireless network devices that are of the desired type and have the desired status (col. 4 lines 60-67); and prioritizing the list of wireless network devices based at least on their associated first signal quality (col. 21 lines 36-40). Olkkonen differs from the claimed invention in not specifically teaching for querying the wireless network device to determine whether it is

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of a desired type; querying the wireless network device to determine whether it has a desired status. However, Stewart teaches querying the wireless network device to determine whether it is of a desired type (read on "additional information") (col. 11 lines 9-20 and col. 16 lines 29-49); querying the wireless network device to determine whether it has a desired status (read on "additional information") (col. 11 lines 9-20 and col. 16 lines 29-49). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for querying the wireless network device to determine whether it is of a desired type; querying the wireless network device to determine whether it has a desired status as per teaching of Stewart, because it provides communications service system that includes a network and a plurality of access points connected to the network and arranged at known locations in a geographic region. One or more service providers or information providers may be connected to the network to provide services or information on the network.

Regarding claim 15, Olkkonen further discloses establishing communications with the wireless network device of the prioritized list of wireless network devices that has the highest priority (col. 46 lines 51-60).

Regarding claim 16, Olkkonen further discloses providing the prioritized list of wireless network devices to a user; and in response to a user selection of one of the wireless network devices of the prioritized list of wireless network devices, establishing communications with the selected wireless network device (col. 47 lines 25-29).

Regarding claim 17, Olkkonen further discloses a portion of the prioritized list of wireless network devices is highlighted based on a second signal quality of the transmitted signals (col.4 lines 60-67).

Regarding claim 18, Olkkonen discloses a computer-usable medium having computer-readable instructions stored thereon capable of causing a processor to perform a method, the method comprising: associating each at least one signal quality with its respective wireless network device and its supplemental information (col. 11 line 33 through col. 12 line 40 and Fig. 1C col. 16 lines 10-22); comparing the supplemental information with a selection criteria to determine whether any wireless network device (Fig. 1A items 104, 114, and 124) matches the selection criteria (col. 11 line 33 through col. 12 line 40 and Fig. 1C col. 16 lines 10-22); and if a wireless network device matches the selection criteria, prioritizing (read on "ranks") that wireless network device (Fig. 1A items 104, 114, and 124) against other wireless network devices matching the selection criteria, wherein the prioritization (read on "ranks") is based on the at least one signal quality for each of the wireless network devices matching the selection criteria (col. 14 lines 30-45). Olkkonen differs from the claimed invention in not specifically teaching for each of one or more transmitting wireless network devices, receiving a signal, wherein the signal has at least one signal quality (col. 4 lines 60-67); and querying for supplemental information from each wireless network device associated with a received signal. However, Stewart teaches for each of one or more transmitting

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wireless network devices, receiving a signal, wherein the signal has at least one signal quality (col. 48 lines 15-20); and querying for supplemental information from each wireless network device associated with a received signal (col. 16 lines 29-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for each of one or more transmitting wireless network devices, receiving a signal, wherein the signal has at least one signal quality (col. 4 lines 60-67); and querying for supplemental information from each wireless network device associated with a received signal as per teaching of Stewart, because it provides communications service system that includes a network and a plurality of access points connected to the network and arranged at known locations in a geographic region. One or more service providers or information providers may be connected to the network to provide services or information on the network.

Regarding claim 19, Olkkanen further discloses the at least one signal quality comprises a signal strength and wherein the method further comprises: prioritizing the wireless network devices based on signal strength (col. 4 lines 60-67); and establishing communications with the wireless network device having the highest signal strength (col. 46 lines 51-60).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen et al. (U.S PAT. 6,842,460 hereinafter, "Olkkonen") in view of Terlep et al. (U.S PAT. 5,796,777 hereinafter, "Terlep").

Regarding claim 7, Olkkonen discloses a method of identifying and prioritizing wireless network devices, the method comprising: detecting a signal from one or more wireless network devices, wherein each signal has at least one signal quality; identifying each of the detected wireless network devices that match a selection criteria; associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria; and prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality. Olkkonen differs from the claimed invention in not specifically teaching for prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices using a first sort order based on a first signal quality and using a second sort order based on a second signal quality. However, Terlep teaches prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices using a first sort order based on a first signal quality and using a second sort order based on a second signal quality (col. 1 lines 28-39). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices using a first sort order based on a first signal quality and using a second sort order based on a second signal quality as per teaching

of Terlep, because it enhances for selecting one of the first and second digitized based on the first and second signal quality measurements.

5. Claims 5-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen et al. (U.S PAT. 6,842,460 hereinafter, "Olkkonen") in view of Dupray (U.S PUB. 2004/0266457).

Regarding claim 5, Olkkonen discloses a method of identifying and prioritizing wireless network devices, the method comprising: detecting a signal from one or more wireless network devices, wherein each signal has at least one signal quality; identifying each of the detected wireless network devices that match a selection criteria; associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria; and prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality. Olkkonen differs from the claimed invention in not specifically teaching for identifying each of the detected wireless network devices that match a selection criteria further comprises: generating a data structure comprising supplemental information associated with the detected wireless network devices; and searching the supplemental information to identify those detected wireless network devices that match the selection criteria. However, Dupray teaches identifying each of the detected wireless network devices that match a selection criteria further comprises: generating a data structure comprising supplemental information associated with the

detected wireless network devices (page 5 [0062]); and searching the supplemental information to identify those detected wireless network devices that match the selection criteria (page 4 [0052]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for identifying each of the detected wireless network devices that match a selection criteria further comprises: generating a data structure comprising supplemental information associated with the detected wireless network devices; and searching the supplemental information to identify those detected wireless network devices that match the selection criteria as per teaching of Dupray, because it enhances generally to a system and method for locating people or objects, and in particular, to a system and method for locating a wireless mobile station using a plurality of mobile station location estimators.

Regarding claim 6, Dupray further discloses associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria further comprises associating each at least one signal quality with its respective wireless network device in the data structure prior to searching the supplemental information to identify those detected wireless network devices that match the selection criteria (page 4 [0052]).

Regarding claim 13, Olkkonen discloses a method of identifying and prioritizing wireless network devices, the method comprising: for one or more wireless network devices: detecting a wireless network device, wherein the wireless network device

transmits a signal having a first signal quality; querying the wireless network device to determine whether it is of a desired type; querying the wireless network device to determine whether it has a desired status; and associating the first signal quality with the wireless network device when it is of the desired type and it has the desired status; generating a list of wireless network devices that are of the desired type and have the desired status; and prioritizing the list of wireless network devices based at least on their associated first signal quality. Olkkonen differs from the claimed invention in not specifically teaching for the first signal quality is indicative of a relative distance to the transmitting device or a presumed quality of service available from the transmitting device. However, Dupray teaches the signal transmitted from each wireless network device further has at least one additional signal quality (page 31 [0367]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for the first signal quality is indicative of a relative distance to the transmitting device or a presumed quality of service available from the transmitting device as per teaching of Dupray, because it enhances generally to a system and method for locating people or objects, and in particular, to a system and method for locating a wireless mobile station using a plurality of mobile station location estimators.

Regarding claim 14, Olkkonen further discloses a method of identifying and prioritizing wireless network devices, the method comprising: for one or more wireless network devices: detecting a wireless network device, wherein the wireless network

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device transmits a signal having a first signal quality; querying the wireless network device to determine whether it is of a desired type; querying the wireless network device to determine whether it has a desired status; and associating the first signal quality with the wireless network device when it is of the desired type and it has the desired status; generating a list of wireless network devices that are of the desired type and have the desired status; and prioritizing the list of wireless network devices based at least on their associated first signal quality. Olkkonen differs from the claimed invention in not specifically teaching for the signal transmitted from each wireless network device further has at least one additional signal quality. However, Dupray teaches the first signal quality is indicative of a relative distance to the transmitting device or a presumed quality of service available from the transmitting device (page 29 [0347] and [0349]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Olkkonen for the signal transmitted from each wireless network device further has at least one additional signal quality as per teaching of Dupray, because it enhances generally to a system and method for locating people or objects, and in particular, to a system and method for locating a wireless mobile station using a plurality of mobile station location estimators.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen et al. (U.S PAT. 6,842,460 hereinafter, "Olkkonen") in view of Stewart et al. (US PAT. 6,259,405 hereinafter, "Stewart") and further in view of Dupray (U.S PUB. 2004/0266457).

Regarding claim 20, Olkkonen and Stewart, in combination, fails to disclose attenuating each received signal if at least one of the received signals is saturated. However, Dupray teaches attenuating each received signal if at least one of the received signals is saturated (page 32 [0382]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Dupray into view of Olkkonen and Stewart, in order to enhance generally to a system and method for locating people or objects, and in particular, to a system and method for locating a wireless mobile station using a plurality of mobile station location estimators.

Conclusion

7. Any response to this action should be mailed to:

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Commissioner for Patents

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan Nguyen
Examiner
Art Unit 2643



CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600